## In the Specification

Please replace paragraphs [0003], [0004], and [0005] with the following replacement paragraphs [0003], [0004], and [0005]:

**[0003]** Waterborne vessels that require good ride quality and high maneuverability, at all speeds, will most likely have a small waterplane, incorporate canards, stabilizers, and/or foils for ride control, and rudder(s) for maneuvering. However, [[I]]incorporating all these control surfaces on a ship can have an adverse affect on the top speed due to the drag associated with each control surface.

**[0004]** Maneuvering: When a ship is executing a turn, a centrifugal force is generated, which acts horizontally through the center of gravity. The magnitude of the centrifugal force is proportional to the weight of the vessel, the square of the vessel velocity and the radius of turn. This centrifugal force is balanced by a horizontal water pressure acting on the underwater portion of the ship, as illustrated in Figure 2. This heeling moment, which increases with the square of the forward speed of the vessel, tends to roll the vessel in a direction opposite to the direction of a steady turn. The ship will heel until the moment of the ship's weight and buoyancy, the righting moment, equals that of the centrifugal force and the water pressure. The righting moment is generated by the shifting of the center of buoyancy of the vessel opposite the direction of the turn, as shown in Figure 2. Ships with large waterplane areas resist this heeling moment better than ships with small waterplane areas, reducing the angle of inclination or roll angle. However, ride quality is compromised. Small waterplane area vessels will have superior ride

quality compared to ~~over~~ large waterplane area ships but ~~will~~ tend to experience greater roll angles during a turn because of their reduced waterplane area. Although, conventional rudders, and some canards and stabilizers, known in the art, will provide a moment that resists the heeling moment, they typically do not provide the required hydrodynamic force sufficient to prevent the ship from rolling out of the turn. If the rudder is large enough, or separated sufficiently far from the ship's center of gravity ~~enough to provide~~ a moment sufficient to counter the heeling moment can result in [[,]] a level turn or roll into the turn ~~is achievable~~. ~~However~~ Unfortunately, neither of these choices is ~~typically available to the designer because a tremendous performance penalty is experienced or the draft of the ship becomes excessive~~ desirable due to the excessive drag or possible extensive draft from the large rudder.

**[0005]** Ride quality: When a ship experiences waves in a seaway, hydrodynamic forces, caused by surface effects and pressure distributions along the hull, cause undesirable pitching and rolling moments on the ship. Small waterplane area ships are more resilient to these undesirable motions than large waterplane area ships[[,]]; however they ~~will~~ still experience some level of roll and pitch ~~these rolling and pitching~~ motions. A motion control system utilizing canards, stabilizers, and/or foils are often incorporated in a ship design to prevent these unwanted motions. Clearly, the size of the control surfaces and the separation distance from the center of gravity have an impact on the ability to resist these motions.

Please replace paragraph [0007] with the following replacement paragraph [0007]:

**[0007]** Clearly, then, there is a long felt need for a control surface or combination of control surfaces that enable ~~allows~~ a vessel to be steered along ~~travel on~~ a desired heading, while also minimizing rolling and pitching moments.[[,]] Further, there is a long felt need for a vessel able to ~~and~~ execute a turn at any desired speed ~~while contributing to the hydrostatic restoring moment thus rolling the ship into a~~ with the vessel rolling into the turn. Finally, there is a need to implement the above capabilities without imposing excessive drag on the vessel.